

REMARKS/ARGUMENTS

The present Response is responsive to the non-final Office Action mailed October 13, 2009 in the above-identified patent application.

Claims 1-6 and 9-13 are the claims currently pending in the present application.

Rejection of Claims 1-4 and 6 under 35 U.S.C. § 103

Claims 1-4 and 6 are rejected under 35 U.S.C. § 103 as being obvious from Garrett, U.S. Patent No. 3,899,945 in view of Hirakawa et al., U.S. Patent No. 5,297,461 and Scheffer et al., U.S. Patent No. 4,962,683. Reconsideration of this rejection is respectfully requested.

As discussed in the previous Amendment, an effect or advantage according to an aspect Applicant's invention as claimed in claim 1 is that the counter-tooling has a working strip comprising a flexible material, and blades of the first tooling penetrate into the flexible material of the working strip as discussed, for example at Specification, page 3, lines 12-22.

Garrett discloses that the anvil cylinder is completely covered by a relatively thin resilient cover 36 such as polyurethane plastic (Garrett, column 7, lines 11-16 and Fig. 5). Hirakawa discloses a knife cylinder 2 having a knife 1 and an anvil cylinder having an anvil (elastic body) 3 and that the knife cylinder 2 and the anvil cylinder 4 are synchronously rotated opposed to each other as disclosed in the prior art with respect to a rotary shear (Hirakawa, column 6, lines 59-68 and Fig. 4). Scheffer discloses that the knife blades 164 are supported for pivotal movement about their corresponding pivot access 167 against the force of the biasing springs 180 and 192. Thus, Scheffer discloses that interference between the knife blades and the associated anvil bars is accommodated for, and thus because of such movement of the knife blades upon impacting the anvil bar, damage to the knife blades can be eliminated (Scheffer, column 13, lines 6-14 and Fig. 9). Also, Scheffer discloses that a very precise cutting force may be applied between the knife blade and the anvil cylinder and thus the springs are selected to provide a cutting force between the knife blades and the anvil bar of approximately 600 lbs per linear inch along the knife blades to achieve the desired cutting force (Scheffer, column 13, lines 20-22 and Fig. 9).

Accordingly, it would not have been obvious to combine the teachings of Garrett, Hirakawa and Scheffer to arrive at the proposed combination, even if Garrett, Hirakawa and Scheffer could be combined. A hypothetical device resulting from the combination of Garrett, Hirakawa and Scheffer would yield cutting blades mounted on springs. First, working strips

provided on an anvil cylinder would have different shapes, and thus different thicknesses, during passage of the sheet or blank to be cut. Accordingly, the position of each of the edges of the cutting blades would vary with respect to the working strips of the anvil cylinder. That is, such a hypothetical device could work only if the working strips were made of a hard material so as to cooperate with the springs supporting the blades. Therefore, such a hypothetical device with cutting blades mounted on springs would not work if the working strips on the anvil cylinder were made of a material to allow penetration into the working strip by the cutting blades. Stated differently, a hypothetical device with cutting blades mounted on springs and a working strip with flexible material would cause cutout and fold of a poor quality in the sheet or blank because the cutting forces would be improperly set or inadequate and thus working strips with flexible material on the surface of the anvil cylinder would be incompatible with such a hypothetical device. Accordingly, it is respectfully submitted that the recitations of claim 1 would not have been obvious based on a combination of Garrett, Hirakawa and Scheffer.

Claims 2-4 and 6 depend from claim 1, and are therefore patentably distinguishable over the cited art for at least the same reasons.

Rejection of Claim 5 and 9-13 under 35 U.S.C. § 103

Claim 5 is rejected under 35 U.S.C. § 103 as being obvious from Garrett et al., Hirakawa and Scheffer in view of Kishine et al., U.S. Patent No. 6,401,583.

Claims 9-13 are rejected under 35 U.S.C. § 103 as being obvious from Garrett et al., Hirakawa and Scheffer in view of Thiel et al., U.S. Patent No. 6,220,134. Reconsideration of these rejections is respectfully requested.

Kishine and Thiel do not cure the above-discussed deficiencies of Garrett, Hirakawa and Scheffer as they relate to the above-noted features of claim 1. Further, the Office Action does not allege that Thiel discloses or suggests such features.

Therefore, since claims 5 and 9-13 depend claim 1, they are patentably distinguishable over the cited art for at least the same reasons.

In view of the foregoing discussion, withdrawal of the rejections and allowance of the claims of the application are respectfully requested.

Respectfully submitted,

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